

**Commonwealth of Kentucky  
Division for Air Quality**

**PERMIT APPLICATION SUMMARY FORM**

Completed by: Ralph Gosney, P.E.

GENERAL INFORMATION:

Name:	Ticona Polymers, Inc.
Address:	8040 Dixie Highway Florence, KY 41042
Date application received:	11/29/2006
SIC Code/Source description:	3087, Custom Compounding of Purchased Plastics Resins
Source ID:	21-015-00043
Source A.I. #:	259
Activity ID:	APE20060001
Permit ID:	F-07-004

APPLICATION TYPE/PERMIT ACTIVITY:

<input checked="" type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input checked="" type="checkbox"/> Conditional major
__Administrative	<input type="checkbox"/> Title V
__Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input checked="" type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☒ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☒ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☒ Area is non-attainment (list pollutants): PM2.5 and 8-hour Ozone

EMISSIONS SUMMARY:

Pollutant	Actual (tpy) <sup>1</sup>	Potential (tpy)
PM/PM <sub>10</sub>	0.3	<90
SO <sub>2</sub>	0	0
NO <sub>x</sub>	0.1	5
CO	0	4
VOC	0	44
Antimony	--	<9
Cobalt	--	<9
Manganese	--	<9
Nickel	--	<9
Phenol	--	<9
1,4-dichlorobenzene	--	<9
Formaldehyde	--	<9
Methanol	--	<9
Source wide HAPs	--	<22.5

1. Actual emissions are from the Kentucky Division for Air Quality's 2005 Emissions Inventory report.

**SOURCE DESCRIPTION:**

Ticona Polymers, Inc. compounds plastic resins, which consists of mixing of additives and chemicals with a raw polymer resin to impart different physical and chemical properties. Primary emission units include tote loading stations, Henschel mixers, and extrusion. Insignificant activities primarily consist of material and product handling activities. The Standard Industrial Classification (SIC) Code for this source is 3087, *Custom Compounding of Purchased Plastics Resins*.

The potential to emit (as defined in 401 KAR 52:001, Section 1 (56)) of particulate matter less than ten (10) microns (PM<sub>10</sub>) is greater than major source thresholds. Additionally, the potential to emit (as defined in 401 KAR 52:001, Section 1 (56)) of hazardous air pollutants (HAPs) is greater than the major source thresholds of 10 and 25 tons per year for any single HAP and the combination of HAPs, respectively. To preclude the applicability of 401 KAR 52:020, *Title V Permits*, the source has requested voluntary federally enforceable permit limits below major source thresholds. Therefore,

the source is subject to the provisions of 401 KAR 52:030, *Federally-Enforceable Permits for Nonmajor Sources*.

**EMISSIONS AND OPERATING CAPS DESCRIPTIONS:**

Boone County is designated as non-attainment for the 8-hour ozone standard, and is also designated as non-attainment for P M<sub>2.5</sub>. In the absence of site-specific or other qualified data, PM<sub>10</sub> emissions will presume to serve as a surrogate for PM<sub>2.5</sub>. Boone County is designated as attainment for all other criteria pollutants. The source is not a major source of emissions of VOC or nitrogen oxides (NOx). To preclude the applicability of 401 KAR 52:020, *Title V permits*, total annual source-wide emissions shall not exceed the following specific limitations on a twelve (12) consecutive month basis:

- (a) Particulate matter (PM/PM<sub>10</sub>) emissions: 90 tons per year;
- (b) Combined hazardous air pollutant (HAP) emissions: 22.5 tons per year; and
- (c) Single hazardous air pollutant (HAP) emissions: 9 tons per year.

Compliance with these limits shall also make the requirements of 40 CFR Part 63 for major sources of HAP emissions, as incorporated by reference at 401 KAR 63:002, not applicable to this source.

**OPERATIONAL FLEXIBILITY:**

There were no alternative operating scenarios proposed by the permittee.